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Agricultural Marketing Service

### Plant Variety Protection Office Official Journal

Volume 20, No. 4 October - December 1992



### PREFACE

The Plant Variety Protection Act (7 U.S.C. 2321 et seq.) authorizes the Secretary of Agriculture to publish an "Official Journal" to provide the public with information relating to the operations of the Plant Variety Protection Office. The statute also authorizes the Secretary to disseminate technological and other information that encourages innovation and progress in plant breeding.

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### APPLICATIONS RECEIVED

Applications for protection have been filed for the following varieties. Each application has been assigned protection. The seed of these varieties may be labeled "Unauthorized Propagation Prohibited - U.S. Variety Protection Applied For." application number and will be examined to determine whether the variety is entitled to a certificate of OCTOBER 1, 1992 TO DECEMBER 31, 1992

æ

		North Dakota Agricultural Experiment Station	
NAME OF APPLICATION	Plant Breeders 1, Inc.	North Dakota Agricultu	Del Monte Corporation Rogers NK Seed Co. Del Monte Corporation Del Monte Corporation Del Monte Corporation
GEN. APPLICATION (*) DATE	11/18/1992	12/11/1992	10/08/1992 11/06/1992 12/29/1992 12/29/1992 12/30/1992
VARIETY	Citation	Norstar	DMC 04-01 Summit DMC 04-33 DMC 08-47 DMC 06-26
APPL. NO.	B <b>ARLEY</b> 9300028	BEAN, FIELD 9300068	BEAN, GARDEN 9300002 9300016 9300053 9300054

<sup>(\*)</sup> To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

<sup>&</sup>lt; > Identifies temporary designations.

APPLICATIONS RECEIVED OCTOBER 1, 1992 TO DECEMBER 31, 1992

10/26/1992 12/30/1992 12/11/1992 12/24/1992 10/07/1992 (3) 11/20/1992	APPL. NO.	GEN. APPLICATION (*) DATE	NAME OF APPLICANT
0 12/30/1992 12/11/1992 12/24/1992 10/07/1992 (3) 11/20/1992	BENTGRASS, CREEPING 9300012 Regent	18/26/1992	Barenbrug USA - Marketing Division
Jer 12/11/1992 JE 12/24/1992 28588 10/07/1992	BLUEGRASS, KENTUCKY 9300059 SR 2000	12/30/1992	Seed Research of Oregon, Inc.
C-TEE 12/24/1992 SS 28588 10/07/1992 vill (3) 11/20/1992	BLUEGRASS, ROUGH 9300044 Polder	12/11/1992	Mommersteeg International B.V.
25 28588 10/07/1992 4111 (3) 11/20/1992		12/24/1992	Tanimura & Antle, Inc.
vill (3) 11/20/1992	CELERY 9300001 PS 28588	10/07/1992	Petoseed Co., Inc.
	CLOVER, WHITE 9300033 Will	3) 11/20/1992	
12/04/1992	9300040 Genuine 4 Leaf Clover	12/04/1992	Service Florida Agricultural Experiment Station

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### OCTOBER 1, 1992 TO DECEMBER 31, 1992 APPLICATIONS RECEIVED

APPL. VA	VARIETY	GEN. APPLICATION (*) DATE	NAME OF APPLICANT
CLOVER, WHITE (continued) 9300051 Mineooha	tinued) oha	12/24/1992	Toboku National Agricultural Experiment Stations / Ministry of Agriculture, Forestry and Fisheries
CORN, FIELD 9300035 LH166 9300036 LH217 9300037 LH200 9300038 LH184 9300039 LH167 9300048 ICI530		12/03/1992 12/03/1992 12/03/1992 12/03/1992 12/03/1992 12/24/1992	Holden's Foundation Seeds, Inc. ICI Americas Inc. ZENECA Ltd.
COTTON 9300041 HS-44 9300060 DP 5681	31	12/11/1992 12/30/1992	J & S Research Company Delta & Pine Land Company

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6	APPL. NO.	VARIETY	GEN. API	GEN. APPLICATION (*) DATE	NAME OF APPLICANT
	FESCUE, CHEWINGS 9300043 Molinda	INGS Molinda		/11/1992	12/11/1992 Mommersteeg International B.V
	FESCUE, RED 9300042 Hector	Hector	12,	12/11/1992	Mommersteeg International B.V.
	LETTUCE 9300014	El Dorado	11,	11/02/1992	Royal Sluis, Koninklijke Zaaizaadbedrijven
	9300024	9300024 Challenge 9300025 Spector	11,11	11/16/1992	Gebroeders Sluis, BV Zaadunie BV Genecorp, Inc.
	9300026		11,	1/17/1992	Asgrow Seed Company
	MELON, KHARBUZA 9300029 Ali	N, KHARBUZA 9300029 Aliabadi	11,	11/20/1992	Ali Abad Farm
	MUSKMELON 93 ØØØØ3	Sweet Delight	10,	/14/1992	10/14/1992 Hollar Seeds, Inc.

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APPL. NO.	GEN VARIETY (*)	GEN. APPLICATION (*) DATE	NAME OF APPLICANT
MUSTARD 9300061	Metex	12/31/1992	P.H. Petersen, Saatzucht
PEA 9388884	DMC 59-92	10/14/1992	Del Monte Corporation
9300045	DMC 50-21	12/16/1992	Del Monte Corporation
930004 / 9300056	Style DMC 50-04	12/23/1992 12/30/1992	Fure Line Seeds, inc. Del Monte Corporation
9300057	DMC 50-26 TMC 50-68	12/30/1992	Del Monte Corporation Del Monte Corporation
E I I I I I I I I I I I I I I I I I I I			
9300062	ELIA 9300062 Amerigo	12/31/1992	P.H. Petersen, Saatzucht
PUMPKIN 9300020 RS1090	RS1090	11/12/1992	Rupp Seeds, Inc.
RADISH, FODDER 9300063 Adagio	DER Adagio	12/31/1992	P.H. Petersen, Saatzucht

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<sup>&</sup>lt; > Identifies temporary designations.

NAME OF APPLICANT	P.H. Petersen, Saatzucht	Pure-Seed Testing, Inc.	Terral-Norris Seed Co., Inc. Minnesota Agricultural Experiment Station Northrup King Co. Northrup King Co. Delta Pine Land Company Delta Pine Land Company Delta & Pine Land Company Ciba-Geigy Seeds Division	Walter K. Moss
GEN. APPLICATION (*) DATE	12/31/1992	11/23/1992	10/19/1992 (3) 11/10/1992 11/12/1992 11/12/1992 11/12/1992 11/12/1992 11/12/1992	10/27/1992
APPL. NO. VARIETY	RADISH, FODDER (continued) 9300064 Viking	RYEGRASS, PERENNIAL 9300034 Navajo	SOVBEAN 9300010 Terra Vig - 5555 9300017 Alpha 9300018 S46-44 9300019 S62-66 9300021 DP 3818 9300022 DP 3776 9300023 DP 3733	SUDANGRASS 9300013 WKM III

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< > Identifies temporary designations.

NAME OF APPLICANT		John Bodger & Sons Co.		FreshWorld, L.P.	FreshWorld, L.P.	FreshWorld, L.P.	Higgins Farms, Inc.		Colorado State University	Terral-Norris Seed Co., Inc.	AgriPro Biosciences Inc.	Idaho Agricultural Experiment Station	The Andersons				
GEN. APPLICATION (*) DATE		10/15/1992	10/15/1992	10/15/1992	10/15/1992		11/23/1992	11/23/1992	11/23/1992	12/22/1992		10/19/1992	10/26/1992	11/02/1992	11/17/1992	12/28/1992	
GEN.										(3)		(3)		(3)			
VARIETY		<pt358></pt358>	<pt379></pt379>	<pt408></pt408>	<pt441></pt441>		Eureka	Jimmy	Lisa	Navajo Sweet	7	Yuma	Terral 877	Krona	Meridian	Karena	
APPL. NO.	VINCA	9300005	930006	9300007	9300008	WATERMELON	9300030	9300031	9300032	9300067	WHEAT, COMMON	9300009	9300011	9300015	9300027	9300052	

<sup>(\*)</sup> To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

< > Identifies temporary designations.

applications received. During the examination process, the applicant requested this information be amended as Information concerning the varieties below has been published previously in the "Official Journal's" list of indicated below.

	L B.V.			
NAME OF OWNER	12/18/1989 Rijk Zwaan Zaadteelt en Zaadandel B.V.	eelt en Zaadhandel B.V.	12/26/1991 Rogers NK Seed Co.	'SL 173'.
GEN. APPLICATION  (*) DATE	12/18/1989	Zwaan Zaadte	12/26/1991	-3-1> named
VARIETY (*)	UCE 9000062 Eline	Name of owner changed from TS Seeds BV to Rijk Zwaan Zaadteelt en Zaadhandel B.V.	9200053 SL 173	Variety with temporary designation of <sp 173b-3-1=""> named 'SL 1731.</sp>
APPL. NO.	LETTUCE 9000062	Nam	PEA 9200053	Var

Rogers NK Seed Co.

04/07/1992

Variety with temporary designation of <PW 624-2-1-2> named 'Top Pod'.

9200148 Top Pod

<sup>(\*)</sup> To be sold by variety name only as a class of certified seed. A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. < > Identifies temporary designations.

ANT	ıc.		, c		Pioneer Hi-Bred International, Inc.		Pioneer Hi-Bred International, Inc.	
NAME OF APPLICANT	Petoseed Co., Inc.	'Happy Jack'.	Rogers NK Seed Co.	iett'.	Pioneer Hi-Bred	30".		56".
GEN. APPLICATION (*) DATE	05/14/1990	PSR 476> named '	03/13/1992	4317> named 'Juli	04/17/1992	1963A5> named '258	04/17/1992	3031El> named '256
VARIETY	Нарру Јаск	Variety with temporary designation of <fll 476="" psr=""> named 'Happy Jack'.</fll>	Juliett	Variety with temporary designation of <nv 4317=""> named 'Juliett'</nv>	DN 2580	Variety with temporary designation of <wba963a5> named '2580'</wba963a5>	2566	Variety with temporary designation of <wbb031e1> named '2566'</wbb031e1>
APPL. NO.	PUMPKIN 9000175	Vari	WATERMELON 9200130	Vari	WHEAT, COMMON 9200160 2580	Vari	9200161	Vari

< > Identifies temporary designations.

### OCTOBER 1, 1992 TO DECEMBER 31, 1992 APPLICATIONS AMENDED

04/17/1992 Pioneer Hi-Bred International, Inc. NAME OF APPLICANT GEN. APPLICATION (\*) WHEAT, COMMON (continued) VARIETY 9200162 2571 APPL. 2

Variety with temporary designation of <WBB441D1> named '2571'.

< > Identifies temporary designations.

A number within parenthesis indicates the number of generations of certified seed permitted beyond breeder's seed. (\*) To be sold by variety name only as a class of certified seed.

### APPLICATIONS ABANDONED, WITHDRAWN, DENIED, OR INELIGIBLE OCTOBER 1, 1992 TO DECEMBER 31, 1992

Applications for the varieties listed below are no longer being considered for U.S. plant variety protection. Although propagation of these varieties is no longer prohibited by the U.S. Plant Variety Protection Act, varieties published in this list may possibly be protected under the Patent Act.

VARIETY	Aubade	Floriade	Sapphire	<711,712>	<713>	Arizona 90	<m21></m21>	Promontory
APPL. NO.	9600006	9000131	9000130	9100013	9100014	9200005	8900091	9100244
KIND	CAULIFLOWER	CAULIFLOWER	FESCUE, TALL	LETTUCE	LETTUCE	LETTUCE	MUSKMELON	WHEAT, COMMON

< > Identifies temporary designations.

DATE NAME OF OWNER  04/19/1989 Rogers NK Seed Co. 'Agassiz' matures in 86 days, whereas 'Agate' height of 38 cm, a pod length of 112 mm, a pod	steas Agate has a plant height of 22 cm, a pood bod beak of 10.9 mm.  M4/19/1989 Rogers NK Seed Co.  er, 'Guardian' has a longer pod beak and narrower dth of 'Guardian' are 13.7 and 11.8 mm respectively respectively. In addition, 'Guardian' lacks is present in 'Montcalm'.	(3) 06/19/1989 University of Idaho oved Cranberry'; however, 'UI 686' differs from to the common bean mosaic virus (resistant vs
ISSUE DATE  //19/1989 sqassiz' eight of	heak of beak of 19/1989 ', 'Guard' h of 'Guard' spectives spectives as presen	1/19/1989 anberry' common b
BEAN, FIELD 8900188 Agassiz   Most similar to 'Agate'; however, 'Agassiz' matures in 93 days. 'Agassiz' also has a plant height of 38 cm, a pod length of 112 mm, a pod matures in 93 days. 'Agassiz' also has a plant height of 38 cm, a pod length of 112 mm, a pod	width of 8.75 mm, and a pod beak of 8.9 mm, whereas Agate has a plant height of 22 dm, a pod length of 122 mm, a pod width of 11 mm, and a pod beak of 10.9 mm.  8900192 Guardian 'Guardian' is most similar to 'Montcalm'; however, 'Guardian' has a longer pod beak and narrower pod width than 'Montcalm'. The pod beak and width of 'Guardian' are 13.7 and 11.8 mm respectively whereas those of 'Montcalm' are 12 and 12.5 mm respectively. In addition, 'Guardian' lacks anthocyanin pigmentation in its leaf whereas it is present in 'Montcalm'.	8900253 UI 686 'University of Idaho 'University of Idaho 'UI 686' is most similar to 'Michigan Improved Cranberry'; however, 'UI 686' differs from 'Michigan Improved Cranberry' in reaction to the common bean mosaic virus (resistant vs susceptible respectively).

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A. ISSUE NAME OF OWNER	Gontinued)  96 Starlight Starlight Starlight Starlight' is most similar to 'Emerson'. However, 'Starlight' differs from 'Emerson' in its ceaction to Uromyces appendiculatus, the fungus which causes bean rust (resistant vs susceptible espectively).
CERT. GEN. NO. VARIETY (*)	BEAN, FIELD (continued) 9100196 Starlight 'Starlight' is most similar to 'Emerson'. He reaction to <u>Uromyces appendiculatus</u> , the fungrespectively).

### BERMUDAGRASS

'Primavera' is most similar to 'NuMex Sahara'; however, 'Primavera' has a smaller stem diameter (1.3 vs 1.6 mm) and a darker summer color (8.0 vs 6.3; 1-9 scale; 9-darkest green) than 'NuMex 01/30/1991 Farmers Marketing Corp. 9100085 Primavera Sahara'.

### BLUEGRASS, KENTUCKY

'Gemar' is most similar to 'Merion'; however, 'Gemar' lacks leaf margin hairs whereas 'Merion' has 02/26/1991 Idaho Agricultural Experiment Station (2) leaf margin hairs. 9100125 Gemar

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NAME OF CANER	5, KENTUCKX (continued) (2) 02/26/1991 Idaho Agricultural Experiment Station (Sreenley) [Greenley' is most similar to 'Alene'; however, 'Greenley' has a spring green up of 5 days (4/10 vs 4/5) later than 'Alene'. 'Greenley' has a seed weight less than 'Alene' (2746 vs 3880 ng/10,000 seed).	127 Ronde (2) 02/26/1991 Idaho Agricultural Experiment Station 'Ronde' is most similar to 'Kenblue'; however, 'Ronde' is more resistant to leaf spot (7 vs 2; 1-9 scale; 9-most resistant), mildew (7 vs 2), snow mold (5 vs 2) and leaf rust (8 vs 5) than 'Kenblue'.	03/10/1992 Pure-Seed Testing, Inc. ., 'Unique' has a heading date 14 days earlier	01/13/1992 Saatzucht Steinach GmbH. sipa'. 'Supranova' differs from 'Supra' in leaf 'Posipa' in heading 6 days later.
ISSUE	(2) 02/26/1991 Pever, 'Greenley' P s a seed weight le	02/26/1991 'Ronde' is w mold (5 v	03/10/1992 c, 'Unique'	01/13/1992 sipa'. 'Sug 'Posipa' ir
GEN.	(2) ; however, y' has a s	(2) however, s 2), snov	'; however	' and 'Pos reen) and
CERT. NO. VARIETY	BLUEGRASS, KENTUCKY (continued) 9100126 Greenley 'Greenley' is most similar to 'Alene'; however, 'Greenley' has a spring green up of 5 day vs 4/5) later than 'Alene'. 'Greenley' has a seed weight less than 'Alene' (2746 vs 3880 mg/10,000 seed).	9100127 Ronde (2) 02/26/1991 Idaho Agricultural Experiment Ronde' is most similar to 'Kenblue'; however, 'Ronde' is more resistant to leaf spot (7 vscale; 9-most resistant), mildew (7 vs 2), snow mold (5 vs 2) and leaf rust (8 vs 5) than 'Kenblue'.	9200129 Unique (unique 'Midnight'; however, 'Unique' has a heading date 14 days earlier (range: 13-16 days) than 'Midnight'.	BLUBGRASS, SUPINA 9200065 Supranova 9200065 Supranova 'Supranova' differs from 'Supra' in leaf 'Supranova' differs from 'Supra' in leaf color (5 vs 3; 1-9 scale, 9=darkest green) and 'Posipa' in heading 6 days later.

	ept. of	ts S	0)	pes	
NAME OF OWNER	Grasslands Division / New Zealand Dept. of		01/16/1991 Holden's Foundation Seeds, Inc. Ht' differs from 'LH123Ht' in glume color (purple two ear tendency vs single ear).	02/07/1991 Pioneer Hi-Bred International, Inc. ers from 'G39' in number of lateral tassel brancl	08/19/1991 DeKalb Plant Genetics ers from 'B73Ht' in brace root color (green vs vs 5), and 50% silking date (1601 vs 1498 heat
ISSUE	(3) Ø5/Ø2/199Ø	o'; however, 'San Pedro')	Ø1/16/1991 2Ht' differs two ear ter	02/07/1991 fers from 'G	08/19/1991 fers from 'E vs 5), and
GEN.	ORY 9000157 Grasslands Puna (3)	'Grasslands Puna' is most similar to 'San Pedro'; however, from rootstock after grazing (ca. 10 vs l for 'San Pedro').	ELD 01/16/1991 Holden's Foundation Seeds, Inc. "LH212Ht" is most similar to 'LH123Ht'. 'LH212Ht' differs from 'LH123Ht' in glume color (purple vs green) and number of ears per stalk (strong two ear tendency vs single ear).	100 PHR61 PHR61   02/07/1991 Pioneer Hi-Bred International, Inc. 'PHR61' is most similar to 'G39'. 'PHR61' differs from 'G39' in number of lateral tassel branches (I vs 8) and cob color (red vs white).	248 F118 [18] (18] (18] (18] (18] (18] (18] (18] (
CERT.	CHICORY 9000157	'Gras from	CORN, FIELD 9100070 LH212Ht 'LH212Ht' is vs green) and	9100100 PHR61 'PHR61' is (1 vs 8) a	9100248 F118 'F118' is purple), r

NAME OF OWNER	10/28/1991 Northrup King Co. from 'OH43' in silk color (pink vs green) and in	10/28/1991 Northrup King Co. from 'OH43' in silk color (pink vs green) and in rnel rows, whereas '911' has 18 kernel rows.	12/11/1991 ZENECA Ltd. differs from 'B73' in red glume band presence ellow).	01/31/1992 Pioneer Hi-Bred International, Inc. ffers from 'PHM81' in cob color (white vs pink) and
ISSUE	10/28/1991 s from 'OH43'	10/28/1991 s from 'OH43' ernel rows, w	12/11/1991 differs from gellow).	01/31/1992 .ffers from '
CERT. GEN. NO. VARIETY (*)	CORN, FIELD (continued) 9200012 911 '911' is most similar to 'OH43'. '911' differs from 'OH43' in silk color (pink vs green) and in glume color (purple vs green).	9200013 912 's most similar to 'OH43'. '912' differs from 'OH43' in silk color (pink vs green) and in glume color (purple vs green). '912' has 14 kernel rows, whereas '911' has 18 kernel rows.	9200038 ICI 441 'ICI 441' is most similar to 'B73'. 'ICI 441' differs from 'B73' in red glume band presence (present vs absent) and in silk color (red vs yellow).	9200080 PHDD6 phdD6 (a) phdD6 differs from 'PHM81' in cob color (white vs pink) and silk maturity (1090 is 1230 heat units).

NAME OF OWNER	<pre>01/31/1992 Pioneer Hi-Bred International, Inc. 'PHGG7' differs from 'PHJ75' in anther color (yellow vs red)</pre>	01/31/1992 Pioneer Hi-Bred International, Inc. ffers from 'PHG72' in silk maturity (1310 vs 1450 (8 vs 12), and silk color (salmon vs green).	01/31/1992 Pioneer Hi-Bred International, Inc. ffers from 'PHK05' in silk color (yellow vs red), ateral tassel branches (5 vs 8).	TALL 037 Shenandoah 12/01/1989 R. J. Peterson Enterprises, Inc. 1Shenandoah' is most similar to 'Rebel II'; however, 'Shenandoah' has a darker green color (139A vs 137C of The Royal Horticultural Society (R.H.S.) colour chart) and a higher turf density (31 vs 20 tillers/5 in.) than 'Rebel II'.
GEN. ISSUE	01/31/1992 PHGG7' differs from 'PP	01/31/1992 'PHK74' differs from 'Pi branches (8 vs 12), an	01/31/1992 'PHT73' differs from 'Pi umber of lateral tassel	12/01/1989 1 II'; however, 'Shenan ciety (R.H.S.) colour c
CERT. VARIETY	CORN, FIELD (continued) 9200081 PHGG7 'PHGG7' is most similar to 'PHJ75'. and in cob color (white vs red).	9200085 PHK74 is most similar to 'PHG72'. 'PHK74' differs from 'PHG72' in silk maturity (1310 vs 1450 heat units), number of lateral tassel branches (8 vs 12), and silk color (salmon vs green).	9200093 PHT73 is most similar to 'PHK05'. 'PHT73' differs from 'PHK05' in silk color (yellow vs red), in cob color (red vs white), and in number of lateral tassel branches (5 vs 8).	FESCUE, TALL 9000037 Shenandoah 'Shenandoah' is most similar to 'Rebel II'; however, 'Shenandoah' has a darker green color (139A vs 137C of The Royal Horticultural Society (R.H.S.) colour chart) and a higher turf density (31 vs 137C of the Than 'Rebel II'.

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NAME OF OWNER	08/20/1990 Lofts Seed, Inc. ever, 'Rebel Jr.' has a darker leaf color (7.7 vs later in initial heading than 'Rebel II'.	11/14/1990 Sakata Seed America, Inc. r'; however, the seed color of 'Red Vogue' is black	10/28/1991 Petoseed Co., Inc. er, seed color of 'Romulus' is black whereas that of s resistant to lettuce mosaic virus whereas
ISSUE	78/20/1990 ver, 'Rebel later in in:	11/14/1990 r'; however	10/28/1991 r, seed colo resistant
VARIETY (*)	FESCUE, TALL (continued) 98/20/1990 Lofts Seed, Inc. 98/00240 Rebel Jr. 'Rebel Jr.' has a darker leaf color (7.7 vs 4.7; 1-9 scale; 9=darkest green) and is 6 days later in initial heading than 'Rebel II'.	UCE 9100028 Red Vogue 11/14/1990 Sakata Seed America, Inc. 'Red Vogue' is most similar to 'Pybas Red Butter'; however, the seed color of 'Red Vogue' is black whereas that of 'Pybas Red Butter' is white.	9200011 Romulus   10.28/1991 Petoseed Co., Inc.   Romulus   18 most similar to 'Valmaine'; however, seed color of 'Romulus' is black whereas that of 'Valmaine' is white. In addition, 'Romulus' is resistant to lettuce mosaic virus whereas 'Valmaine' is susceptible.
NO.	FESCUE, TALL 9000240 'Reb	LETTUCE 9100028 'Red wher	9200011 'Rom' 'Val'

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NAME OF OWNER
ISSUE
* (*)
VARIETY
CERT.

head height and smaller frame diameter. The head height and frame diameter of 'Impact' are 12 and 'Impact' is most similar to 'Bounty'; however, 'Impact' differs from 'Bounty' in having shorter 04/15/1992 Arthur Yates & Co. Pty. Ltd. 9200158 Impact LETTUCE (continued)

46 om respectively whereas those of 'Bounty' are 13 and 47 om respectively. In addition, 'Impact'

matures in 65 days whereas 'Bounty' takes 68 days to mature.

9200258 Encore

Royal Sluis, Koninklijke Zaaizaadbedrijven Gebroeders Sluis, B.V. 09/09/1992

'Encore' is most similar to 'Dark Green Boston'; however, 'Encore' is resistant to lettuce mosaic virus and downy mildew California pathotypes I, IIA, IIB, III, and IV whereas 'Dark Green Boston' is susceptible to all of those.

height ('Sun Burst' is at least 9 cm taller), and in sieve size class ('Sun Burst' is  $\emptyset.43$  class 'Sun Burst' is most similar to 'Sunfire'; however, 'Sun Burst' differs from 'Sunfire' in plant 12/30/1988 Pure Line Seeds, Inc. 8900068 Sun Burst

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NAME OF OWNER	04/13/1989 Asgrow Seed Company .ffers from <ep8221> in number of flowers borne per</ep8221>	122 Ava belongs to the "Allsweet" group of varieties. It has leaves lighter in color compared to four of these varieties: 'Ava', 143A; 'Caprice', 137B; 'Early Sweet II', 'Payload', and '2213', all 141A,B (R.H.S. Colour Chart). From other "Alsweet" types it may be distinguished by sieve size ('Ava' has a size class of 3.7, whereas 'Alsweet II' is 3.2 and '7025' is 4.2) or by days to flowering ('Ava' is 2 days later to 10% bloom than '7025' and 4 days later than 'Dawn'). Also, 'Ava' is 2 days later to maturity than 'Alsweet II'.
ISSUE	Ø4/13/1989 iffers from	05/25/1989 ties. It ha e', 137B; '! Alsweet II' than '7025' t II'.
GEN.	irbo' d	Varie Capric other reas ' bloom
CERT. VARIETY	<pre>PEA (continued) 8900162 Turbo 'Turbo' is most similar to <ep8221>; 'Turbo' differs from <ep8221> in number of flowers borne per node (2-4 vs 2).</ep8221></ep8221></pre>	8900222 Ava halongs to the "Allsweet" group of varieties. It has leaves lighter in color compared to four of these varieties: 'Ava', 143A; 'Caprice', 137B; 'Early Sweet II', 'Payload', and '2213', all 141A,B (R.H.S. Colour Chart). From other "Alsweet" types it may be distinguished by sieve size ('Ava' has a size class of 3.7, whereas 'Alsweet II' is 3.2 and '7025' is 4.2) or by days thowaring ('Ava' is 2 days later to 10% bloom than '7025' and 4 days later than 'Dawn'). Also, 'Ava' is 2 days later to maturity than 'Alsweet II'.

(\*) To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

'Booster' is most similar to '9000 Freezer'; however, 'Booster' is susceptible to red clover vein

mosaic virus whereas '9000 Freezer' is tolerant.

8900224 Booster

05/25/1989 Nunhems Seed Corporation

			TS.	_
NAME OF OWNER	02/23/1990 Rogers NK Seed Co. wer, 'Revolution' bears 2 pods at a node with a kle' produces 2 pods at a node at a frequency of	05/13/1991 Rogers NK Seed Co. Sonic' is resistant to races 5 and 6 of <u>Fusarium</u> <4917-8> is susceptible.	Rogers NK Seed Co. nd 'Stringless Sugar Snap'. However, enation mosaic virus (resistant vs c virus (resistant vs susceptible).	02/03/1992 Asgrow Seed Company However, 'Alsweet III' differs from 'Alsweet II' in vine habit (determinate vs indeterminate).
ISSUE	2/23/1990 er, 'Revo le' produ	5/13/1991 conic' is H917-8> i	2/26/1991 Daddy', a the pea ein mosai	2/03/1992 However, in vine h
GEN.	ø'; howev as 'Spark	Ø wever, 'S whereas <	l ''Sugar action to clover v	et II'. ter) and
CERT. VARIETY	PEA (continued) 9000097 Revolution 'Revolution' is most similar to 'Sparkle'; however, 'Revolution' bears 2 pods at a node with a frequency of between 39% and 53%, whereas 'Sparkle' produces 2 pods at a node at a frequency of less than 1%.	9100175 Sonic	9200053 SL 173   Sugar Pop', 'Sugar Pop', 'Sugar Pop', 'Sugar Pop', 'Sugar Paddy', and 'Stringless Sugar Snap'. However, 'SL 173' differs from these varieties in reaction to the pea enation mosaic virus (resistant vs susceptible) and in reaction to the red clover vein mosaic virus (resistant vs susceptible).	9200099 Alsweet III 'Alsweet III' is most similar to 'Alsweet II'. However, 'Alsweet III' differs from 'Alsweet III' in maturity ('Alsweet III' is 5 days later) and in vine habit (determinate vs indeterminate).

NAME OF OWNER	02/03/1992 Asgrow Seed Company illy' differs from 'Flair' in foliage type	Rogers NK Seed Co. differs from 'Rondo' in number of nodes 21 vs 18 respectively).	02/26/1991 Texas Agricultural Experiment Station alapeno varieties grown in Veracruz, Mexico. It is the United States. 'TAM Veracruz' has higher 0 vs 9100-18700 Scoville units), and greater M' (very resistant vs very susceptible). The ypical of the true jalapeno type.
ISSUE	02/03/1992 Filly' diffe	04/07/1992 , 'Top Pod' di last bloom (21	02/26/1991 jalapeno var o the United 30 vs 9100-1 o M' (very r typical of t
CERT. GEN. OARIETY (*)	PEA (continued) 9200103 Filly 9201104 is most similar to 'Flair'; however, 'Filly' differs from 'Flair' in foliage type (filiform vs normal leaflets respectively).	9200148 Top Pod 'Rondo'. However, 'Top Pod' differs from 'Rondo' in number of nodes to first bloom (18 vs 14 respectively) and to last bloom (21 vs 18 respectively).	PEPPER 9100123 TAM Veracruz 92/26/1991 Texas Agricultural Experiment Station 9100123 TAM Veracruz is most similar to creole type jalapeno varieties grown in Veracruz, Mexico. It is the first variety of this type to be adapted to the United States. 'TAM Veracruz' has higher pungency than 'TAM Mild Jalapeno-1' (20300-24200 vs 9100-18700 Scoville units), and greater resistance to tobacco etch virus than 'Jalapeno M' (very resistant vs very susceptible). The fruit of 'TAM Veracruz' has cuticular cracks, typical of the true jalapeno type.

(\*) To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OWNER	continued) 206 Sonora Anaheim 'Sonora Anaheim' is most similar to 'NuMex R Naky' and 'NuMex Big Jim'. 'Sonora Anaheim' differs from 'NuMex R Naky' in fruit weight (79 vs 66 gm), and differs from 'NuMex Big Jim' in immature fruit color (dark green vs light green). 'Sonora Anaheim' has no anthocyanin on its hypocotyl but both 'NuMex R Naky' and 'NuMex Big Jim' have anthocyanin coloration on their hypocotyls.	California Cooperative Rice Research Foundation, Inc.	cm shorter (82 vs 90 cm) and has milled kernels of 'S-101' are te belly.
ISSUE	7/01/1991 y' and 'Nv ), and di: a Anaheim'	(3) 11/28/1988	101' is 8 aves. The ounced who
GEN.	fex R Nakrys 6 gm vs 66 gm 'Sonor.'	(3) 1.	abrous le
AT.  VARIETY	PEPPER (continued) 9100206 Sonora Anaheim 'Sonora Anaheim' is most similar to 'NuMex R Naky' and 'NuMex Big Jim'. 'Sonora Anaheim' differ from 'NuMex R Naky' in fruit weight (79 vs 66 gm), and differs from 'NuMex Big Jim' in immature fruit color (dark green vs light green). 'Sonora Anaheim' has no anthocyanin on its hypocotyl k both 'NuMex R Naky' and 'NuMex Big Jim' have anthocyanin coloration on their hypocotyls.	8900034 S-101	'S-101' is most similar to 'S-201'; however, 'S-101' is 8 cm shorter (82 vs 90 cm) and has pubescent leaves whereas 'S-201' has glabrous leaves. The milled kernels of 'S-101' are translucent whereas those of 'S-201' have a pronounced white belly.
CERT.	PEPPER ( 9100	RICE 8900	

(\*) To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

'M-203' is most similar to 'M-401'; however, 'M-203' has a heading date 16 days earlier (92 vs 108

days) than 'M-401'.

8900035 M-203

(3) 11/28/1988 California Cooperative Rice Research

Foundation, Inc.

NAME OF OWNER	236 PHB86 is most similar to 'Wheatland'. However, 'PHB86' has a red plant color, a red glume color, and is resistant to pathotypes 1 and 3 of $\overline{\text{Peronosclerospora}}$ sorghi (downy mildew); whereas 'Wheatland' has a purple plant color, a black glume color, and is susceptible to pathotypes 1 and 3 of $\overline{\text{Peronosclerospora}}$ sorghi.	's the maintainer line has a normal cytoplasm.	06/06/1989 Pioneer Hi-Bred International, Inc. 'PHA82' is resistant to pathotype 1 of a light green leaf color, whereas 'TX3042' is a dark green leaf color.
ISSUE	5/06/1989 , 'PHB86' Peronosc .me color	ot 'PHB86 nas an Al	5/06/1989 PHA82' is a light gark gr
GEN.	90 However, and 3 of black glu	ee, excer le line b	Wever, 'E and has a
CERT. VARIETY	SORGHUM 8900236 PHB86 'PHB86' is most similar to 'Wheatland'. However, 'PHB86' has a red plant color, a red glume color, and is resistant to pathotypes 1 and 3 of Peronosclerospora sorghi (downy mildew); whe 'Wheatland' has a purple plant color, a black glume color, and is susceptible to pathotypes 3 of Peronosclerospora sorghi.	'PHB86' and 'PHA86' have the same pedigree, except 'PHB86' as the maintainer line has a normal cytoplasm, and 'PHA86' as the male sterile line has an Al cytoplasm.	8900237 PHA82   Special of Special of Property   100000000000000000000000000000000000

(\*) To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

'PHA82' and 'PHB82' have the same pedigree, except 'PHA82' as the male sterile line has an Al

cytoplasm, and 'PHB82' as the maintainer line has a normal cytoplasm.

NAME OF OWNER	06/06/1989 Pioneer Hi-Bred International, Inc. PHB82' is resistant to pathotype 1 of a light green leaf color, whereas 'TX3042' is a dark green leaf color.	as the maintainer line has a normal cytoplasm.	239 PH328 similar to 'TX3042'; however, 'PH328' is resistant to biotype C and E of Schizaphis graminum (greenbug), whereas 'TX3042' is susceptible to biotype C and E of S. graminum.	$06/06/1989$ Pioneer Hi-Bred International, Inc. PH333' is resistant to pathotype 1 of s'TX2737' is susceptible to pathotype 1 of $\overline{P}$ .
ISSUE	76/06/1989 PHB82' is a light a dark gr	ept 'PHB82 has an Al	%6/%6/1989 94328' is ' is susce	%6/%6/1989 %21333 is %1TX2737
GEN.	owever, 'Band has	gree, excerile line	owever, 'I	owever, 'E
CERT. VARIETY	SORGHUM (continued) 8900238 PHB82 'PHB82' is most similar to 'TX3042'; however, 'PHB82' is resistant to pathotype 1 of Peronosclerospora sorghi (downy mildew) and has a light green leaf color, whereas 'TX3042' is susceptible to pathotype 1 of P. sorghi and has a dark green leaf color.	'PHB82' and 'PHA82' have the same pedigree, except 'PHB82' as the maintainer line has a normal cytoplasm, and 'PHA82' as the male sterile line has an Al cytoplasm.	8900239 PH328 'PH328' is most similar to 'TX3042'; however, 'PH328' is resistant to biotype C and E of Schizaphis graminum (greenbug), whereas 'TX3042' is susceptible to biotype C and E of S.	8900240 PH333 is most similar to 'TX2737'; however, 'PH333' is resistant to pathotype 1 of Peronosclerospora sorghi (downy mildew), whereas 'TX2737' is susceptible to pathotype 1 of P.

(\*) To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OWNER	10/10/1990 Pioneer Hi-Bred International, Inc. PH352' is resistant to biotype E of $\frac{Schizaphis}{E}$ tible to biotype E of $\frac{S}{E}$ , $\frac{Graminum}{E}$ .	08/02/1991 Pioneer Hi-Bred International, Inc. H288' is resistant to race 5 of <u>Sphacelotheca</u> ptible to race 5 of <u>S. reiliana.</u>	08/02/1991 Pioneer Hi-Bred International, Inc. PH355' has a tan plant pigment, a white grain losclerospora sorghi (downy mildew), whereas in color, and is susceptible to pathotype 1 of P.
ISSUE	10/10/1990 PH352' is r tible to bi	08/02/1991 H288' is re ptible to r	08/02/1991 PH355' has osclerospor n color, an
GEN.	nowever, '	wever, 'P is susce	of Peron
CERT. VARIETY	SORGHUM (continued) 9100007 PH352	9100227 PH288 is most similar to 'TX2737; however, 'PH288' is resistant to race 5 of <u>Sphacelotheca reiliana</u> (head smut), whereas 'TX2737' is susceptible to race 5 of <u>S. reiliana</u> .	9100228 PH355 'PH355' is most similar to 'TX3042'; however, 'PH355' has a tan plant pigment, a white grain color, and is resistant to pathotype 1 of Peronosclerospora sorghi (downy mildew), whereas 'TX3042' has a purple plant pigment, a red grain color, and is susceptible to pathotype 1 of Peronosclerospora sorghi.

<sup>(\*)</sup> To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OWNER	08/02/1991 Pioneer Hi-Bred International, Inc. PH356' has a mahogany glume color, an open panicle of <u>Peronosclerospora sorghi</u> (downy mildew), i-compact panicle density, and is susceptible to	08/02/1991 Pioneer Hi-Bred International, Inc. PH410' is 10 inches taller and 5 days later in as a red plant pigment, whereas 'RTx430' has a	08/02/1991 Pioneer Hi-Bred International, Inc. PH449' is resistant to race 4 of Sphacelotheca or, and a tan glume color, whereas 'TX2737' is low endosperm color, and a straw glume color.
ISSUE	08/02/1991 'PH356' has 3 of <u>Peronos</u> mi-compact	08/02/1991 'PH410' is ] has a red pl	08/02/1991 'PH449' is 1 lor, and a 1 llow endospe
CERT. GEN. NO. VARIETY (*)	9100229 PH356 9100229 PH356 1PH356' is most similar to 'TX2737'; however, 'PH356' has a mahogany glume color, an open panicle density, and is resistant to pathotypes 1 and 3 of Peronosclerospora sorghi (downy mildew), whereas 'TX2737' has a straw glume color, a semi-compact panicle density, and is susceptible to pathotypes 1 and 3 of P. sorghi.	9100230 PH410 (1.2. International, I	9100231 PH449  'PH449' is most similar to 'TX2737'; however, 'PH449' is resistant to race 4 of Sphacelotheca reliiana (head smut), has a white endosperm color, and a tan glume color, whereas 'TX2737' is susceptible to race 4 of S. reiliana, has a yellow endosperm color, and a straw glume color.

NAME OF OWNER	$08/02/1991$ Pioneer Hi-Bred International, Inc. er, 'PHA331' is resistant to races 4 and 5 of tant to pathotypes 1 and 3 of Peronosclerospora susceptible to races 4 and 5 of $\overline{s}$ , reiliana and is	l' as a male sterile has an ${\mathbb A}{\mathbb I}$ al cytoplasm.	08/02/1991 Pioneer Hi-Bred International, Inc. er, 'PHB331' is resistant to races 4 and 5 of
ISSUE	08/02/1991 er, 'PHA331 tant to pat usceptible	cept 'PHA33 has a norm	08/02/1991 er, 'PHB331
GEN.	Howev resis iss	ree ex r line	Howev
CERT. VARIETY	SORGHUM (continued) 9100232 PHA331 'PHA331' is most similar to 'Wheatland'. However, 'PHA331' is resistant to races 4 and 5 of Sphacelotheca reiliana (head smut) and is resistant to pathotypes 1 and 3 of Peronosclerospora sorghi (downy mildew), whereas 'Wheatland' is susceptible to races 4 and 5 of S. reiliana and is susceptible to pathotypes 1 and 3 of Peronosclerospora	'PHA331' and 'PHB331' have the same pedigree except 'PHA331' as a male sterile has an Alcytoplasm, whereas PHB331' as a maintainer line has a normal cytoplasm.	9100233 PHB331 is most similar to 'Wheatland'. However, 'PHB331' is resistant to races 4 and 5 of

(\*) To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

sorghi (downy mildew), whereas 'Wheatland' is susceptible to races 4 and 5 of S. reiliana and is Sphacelotheca reiliana (head smut) and is resistant to pathotypes 1 and 3 of Peronosclerospora

susceptible to pathotypes 1 and 3 of P. sorghi.

'PHB331' and 'PHA331' have the same pedigree except 'PHB331' as a maintainer line has a normal

cytoplasm, whereas 'PHA331' as a male sterile has an Al cytoplasm.

CERT.		GEN.	ISSUE	
NO.	VARIETY	(*)	DATE	NAME OF OWNER
TITLE / SELLEN	1.5			

#### SORGHUM (continued)

'IX3042' has a black glume color, a red pericarp color, and is susceptible to biotypes C and E of 'PHB429' is most similar to 'TX3042'; however, 'PHB429' has a tan glume color, a white pericarp color, and is resistant to biotypes C and E of the Schizaphis graminum (greenbug), whereas 08/02/1991 Pioneer Hi-Bred International, Inc.

#### 9100236 PHA432

S. graminum.

to biotypes C and E of Schizaphis graminum (greenbug), whereas 'Wheatland' has a black glume color and is susceptible to biotypes C and E of  $\underline{S}$ , graminum. 'PHB432' is most similar to 'Wheatland'; however, 'PHB432' has a tan glume color and is resistant 08/02/1991 Pioneer Hi-Bred International, Inc.

'PHA432' and 'PHB432' have the same pedigree except 'PHA432' as a male sterile has an Al cytoplasm, whereas 'PHB432' as a maintainer line has a normal cytoplasm. (\*) To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

ISSUE DATE NAME OF OWNER	(continued) (237 PHB432 'PHB432 is most similar to 'Wheatland'; however, 'PHB432' has a tan glume color and is resistant to biotypes C and E of Schizaphis graminum (greenbug), whereas 'Wheatland' has a black glume color and is susceptible to biotypes C and E of 5. graminum.	'PHB432' and 'PHA432' have the same pedigree except 'PHB432' as a maintainer line has a normal cytoplasm, whereas 'PHA432' as a male sterile has an Al cytoplasm.	1862 Delsoy 4980 (3) 01/04/1991 The Curators of the University of Missou 'Delsoy 4900' closely resembles 'Hill' in plant type; however, 'Delsoy 4900' is resistant to race 3 of soybean cyst nematode whereas 'Hill' is susceptible. In addition, 'Delsoy 4900' has purple
I Q	08/0% r, 'l enbuc amin	cept as al	01/04 type scept
GEN.	howeve um (gre- fs. gr	gree ex erile h	(3) n plant ' is su
CERT. NO.	SORGHUM (continued) 9100237 PHB432 'PHB432' is most similar to 'Wheatland'; however, 'PHB to biotypes C and E of Schizaphis graminum (greenbug), and is susceptible to biotypes C and E of S. graminum.	'PHB432' and 'PHA432' have the same pedigree except 'PHB432' as a cytoplasm, whereas 'PHA432' as a male sterile has an Al cytoplasm.	SOYBEAN 9100062 Delsoy 4900 10elsoy 4900 closely resembles 'Hill' i 3 of soybean cyst nematode whereas 'Hill

flowers whereas 'Hill' has white flowers.

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NAME OF OWNER	05/31/1991 Asgrow Seed Company and 'A2872'. However, 'A1662' 62' is resistant to races 3, 4, 5, 7, 8, and 9 of (Phytophthora root rot), whereas 'Kato' is ', a low peroxidase activity, and a brown pod wall ity, a high peroxidase activity, and a tan pod wall 13, 17, and 21 of P. megasperma Drechs. f. sp. 13, 17, and 21 of P. megasperma Drechs. f. sp. 62' has a mid group I maturity and a brown pod wall turity and a tan pod wall color; and 'A1662' has a ity, whereas 'A2872' has a late group II maturity
ISSUE	15/31/1991 12 is resi (Phytophth a low per ty, a high 13, 17, ar 13, 17, ar
GEN.	y', 'Ker' 'Al66 ycinea yturity, maturity, '7-11,' '7-11,' '8, 'Al66 o II mate activity activity activity
CERT. NO. VARIETY	SOYBEAN (continued) 9100192 Al662 'Al662' is most similar to 'Kato', 'A2543', 'Kenwood', 'A2234', and 'A2872'. However, 'Al662' differs by the following characteristics: 'Al662' is resistant to races 3, 4, 5, 7, 8, and 9 of Phytophthora megasperma Drechs. f. sp. glycinea (Phytophthora root rot), whereas 'Kato' is susceptible; 'Al662' has a mid group I maturity, a low peroxidase activity, and a brown pod wall color, whereas 'A2543' has a mid group II maturity, a high peroxidase activity, and a tan pod wall color; 'Al662' is resistant to races 1-5, 7-11, 13, 17, and 21 of P. megasperma Drechs. f. sp. glycinea whereas 'Kenwood' is susceptible; 'Al662' has a mid group I maturity and a brown pod wall color, whereas 'A234' has an early group II maturity and a tan pod wall color; and 'Al662' has a mid group I maturity and a low peroxidase activity, whereas 'A2872' has a late group II maturity and a high peroxidase activity.

CXZ6/' IS most similar to 'A2943'. However, 'CXZ67' is resistant to race 3 of Phytophthora megasperma f. sp. glycinea (Phytophthora root rot), whereas 'A2943' is susceptible to race 3 of P. megasperma f. sp. glycinea. 07/08/1991 DeKalb Plant Genetics 9100209 CX267

(\*) To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OWNER	(continued) 10/09/1991 Northrup King Co. 133-32 is most similar to Pioneer '9341'; however, it can be differentiated from '9341' on the basis of pubescence color and reaction to race 3 of Phytophthora megasperma (Phytophthora rot). 1533-32' has light tawny pubescence and is resistant to race 3 of P. megasperma; '9341' has tawny pubescence and is susceptible to race 3 of that pathogen.	10/09/1991 Northrup King Co. 'S39-11' is most similar to 'S43-34' and 'Fayette'; however, 'S39-11' has a black hilum color and a tawny pubescence color, whereas 'S43-34' has a buff hilum and a grey pubescence color. Also, 'S39-11' is 6 cm shorter in height than 'Fayette'. In addition, 'S39-11' has a dull seed coat and a spherical flattened seed shape, whereas 'Fayette' has a shiny seed coat and a spherical round seed shape.	019 Leslie (3) 11/14/1991 Minnesota Agricultural Experiment Station 'Leslie' is most similar to 'Sturdy'; however, 'Leslie' is susceptible to iron chlorosis and has tan pods, whereas 'Sturdy' is resistant to iron chlorosis and has brown pods.
ISSUE	10/09/1991 ever, it can of Phytostant to repart to repar	10/09/1991 te'; howev a buff hill e'. In ad	11/14/1991 'Leslie' i: chlorosis
GEN.	341'; how to race d is resi	nd 'Fayet -34' has n 'Fayett eas 'Faye	(3) however,
CERT. NO. VARIETY	SOYBEAN (continued) 9200003 S33-32 'S33-32' is most similar to Pioneer '9341'; however, it compasses of pubescence color and reaction to race 3 of Phytol 'S33-32' has light tawny pubescence and is resistant to repubescence and is susceptible to race 3 of that pathogen.	9200004 539-11 is most similar to 'S43-34' a a tawny pubescence color, whereas 'S43-843-11' is 6 cm shorter in height that a spherical flattened seed shape, where	9200019 Leslie Minnesota Agricul (3) 11/14/1991 Minnesota Agricul Leslie is most similar to 'Sturdy'; however, 'Leslie' is susceptible to iro tan pods, whereas 'Sturdy' is resistant to iron chlorosis and has brown pods.

NAME OF OWNER	12/10/1991 Ciba-Geigy Seeds Division 11' is susceptible to race 1 of Phytophthora ''3311' exhibits low seed protein peroxidase otein peroxidase activity.	12/24/1991 FFR Cooperative lentury 84'; however, 'FFR 253' may be distinguished from 'Century 84' by the following characteristics: 'FFR 253' has tan pods, white flowers, and larger seeds (p < .05 for LSD values over 3 years), whereas 'Century 84' has brown pods and purple flowers.	06/08/1990 Ferry-Morse Seed Company er, 'Promo' has fewer flowers per third spectively, in 2 localities).	Harris Moran Seed Company resistant to southern root knot
ISSUE	.2/10/1991 .1' is sus .'3311' e	2/24/1991 'er, 'FFR has tan ntury 84'	16/08/1990 er, 'Pramo spectively	02/21/1991 'Orion' is re
GEN.	l ver, '331 t. Also, seed pro	1 4'; howev FFR 253' reas 'Cer	%; howeves 7.2 res	owever, '
CERT. VARIETY	SOYBEAN (continued) 9200036 3311 '3311' is most similar to 'A2943'; however, '3311' is susceptible to race 1 of Phytophthora megasperma, whereas 'A2943' is resistant. Also, '3311' exhibits low seed protein peroxidase activity, whereas 'A2943' exhibits high seed protein peroxidase activity.	9200055 FFR 253  'FFR 253' is most similar to 'Century 84'; however, 'FFR 253' may be distinguished from 'Ce 84' by the following characteristics: 'FFR 253' has tan pods, white flowers, and larger se < .05 for LSD values over 3 years), whereas 'Century 84' has brown pods and purple flowers.	TOWATO 9000202 Promo 9000202 Promo 1 (Cannery Row'; however, 'Promo' has fewer flowers per third inflorescence than 'Cannery Row' (5.8 vs 7.2 respectively, in 2 localities).	9100121 Orion '02/21/1991 Harris Moran Seed Company 'Orion' is most similar to 'HM 3075'; however, 'Orion' is resistant to southern root knot nematode, whereas 'HM 3075' is susceptible.

ISSUE

GEN.

WATERFELD.  WATERPELD.  WATERP	Jubilee II'.
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CERT.

NAME OF OWNER	03/13/1989 Pioneer Hi-Bred International, Inc. 2548' the head is awned, whereas in '2550' it is is ivory, whereas in '2550' it is dark brown.	(3) 03/20/1989 AgriPro Biosciences Inc. 'Trailblazer'; however, 'Rio Blanco' differs from both hite for 'Rio Blanco', red for 'Mesa' and	(3) 08/21/1989 Wisconsin Agricultural Experiment Station ever, 'Merrimac' differs from 'Argee' in shoulder shape n reaction to <u>Tilletia tritici</u> , the fungus which causes pectively).	(2) 12/26/1990 Virginia Agricultural Experiment Station wever, 'Wakefield' has glumes with acute beaks, whereas enol reaction of 'Wakefield' is brown (Class IV).
ISSUE DATE	03/13/1989 '2548' the h is ivory, w	03/20/1989 silblazer'; for 'Rio Bl	08/21/1989 , 'Merrimac' action to Ti	12/26/1990 c, 'Wakefiel
CERT. GEN. OARIETY (*)	WHEAT, COMMON 8900112 2548 8900112 2548 8900112 2548 15 most similar to '2550'; however, in '2548' the head is awned, whereas in '2550' it is awnleted. Also, the phenol reaction of '2548' is ivory, whereas in '2550' it is dark brown.	8900120 Rio Blanco (3) 03/20/1989 AgriPro Biosciences Inc. 'Rio Blanco' is most similar to 'Mesa' and 'Trailblazer'; however, 'Rio Blanco' differs from both 'Mesa' and 'Trailblazer' in grain color (white for 'Rio Blanco', red for 'Mesa' and 'Trailblazer').	8900293 Merrimac (3) 08/21/1989 Wisconsin Agricultural Experiment State 'Merrimac' is most similar to 'Argee'; however, 'Merrimac' differs from 'Argee' in shoulder shape (oblique vs elevated, respectively), and in reaction to Tilletia tritici, the fungus which causes common bunt (resistant vs susceptible, respectively).	9100055 Wakefield (2) 12/26/1990 Virginia Agricultural Experiment Stat. Wakefield has glumes with acute beaks, whereas those of 'Tryler' are obtuse. Also, the phenol reaction of 'Wakefield' is brown (Class IV).

those of 'Tyler' are obtuse. Also, the phenol reaction of 'Wakefield' is brown (Class IV),

whereas that of 'Tyler' is light brown (Class III).

<sup>(\*)</sup> To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

NAME OF OWNER	OMMON (continued) (2) 12/26/1990 Virginia Agricultural Experiment Station 'Madison 'Madison' is most similar to 'Massey'. However, 'Madison' has glumes with acute beaks, whereas the beaks of the glumes of 'Massey' are obtuse. Also, the coleoptiles of 'Madison' are white and the anthers are yellow, whereas in 'Massey' these structures are purple.	PELT GR 900  241 GR 900  16R 900' is most similar to 'Champ'; however, 'GR 900' differs from 'Champ' in awnedness; there is no terminal tip awn exceeding 1/4 inch in length in 'GR 900', and there usually is none at all, whereas in 'Champ' awns are usually present and usually 1 inch in length. Also, the heads of 'GR 900' resemble those of common wheat more than do those of 'Champ', which is a more typical spelt (with spike very lax, long in proportion to width).
ISSUE	12/26/1990 ', 'Madison' Also, the	08/05/1991 GR 900' dif h in 'GR 90'   usually 1   those of
GEN. (*)	OMMON (continued) (2) 12/26/1990 Virginia Agr "Madison 'Madison' is most similar to 'Massey'. However, 'Madison' has glumes withe beaks of the glumes of 'Massey' are obtuse. Also, the coleoptiles of the anthers are yellow, whereas in 'Massey' these structures are purple.	PELT (2) 08/05-241 GR 900 (2) 08/05-241 GR 900' is most similar to 'Champ'; however, 'GR 90 no terminal tip awn exceeding 1/4 inch in length in whereas in 'Champ' awns are usually present and usua 300' resemble those of common wheat more than do the (with spike very lax, long in proportion to width).
CERT. VARIETY	WHEAT, COMMON (continued) 9100056 Madison 'Madison' is most the beaks of the of the anthers are ye	WHEAT, SPELT 9100241 GR 900 'GR 900' is most s no terminal tip av whereas in 'Champ' 900' resemble thos (with spike very 1

<sup>(\*)</sup> To be sold by variety name only as a class of certified seed. A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed.

#### CERTIFICATES AMENDED OCTOBER 1, 1992 TO DECEMBER 31, 1992

The following certificates have been amended in accordance with sections 180.103, 180.122, and 180.130 of the Regulations and Rules of Practice under the Plant Variety Protection Act.

GEN, ISSUE (*) DATE NAME OF OWNER	LH123HT 02/22/1985 Holden's Foundation Seeds, Inc.
VARIETY	H123HT
CERT.	CORN, FIELD 8400030 1

Novelty statement on this variety amended to read "'LH123HT' most closely resembles 'OH43HT'; however, 'LH123HT' has a red cob whereas 'OH43HT' has a white cob."

# 8700078 Louisiana Sweet (\*) 12/18/19

WATERMELON

(\*) 12/18/1987 Louisiana Agricultural Experiment Station

Variety name changed from 'Red-N-Sweet' to 'Louisiana Sweet'.

A number within parentheses indicates the number of generations of certified seed permitted beyond breeder's seed. (\*) To be sold by variety name only as a class of certified seed.

<sup>&</sup>lt; > Identifies temporary designations.

### CERTIFICATES EXPIRED OCTOBER 1, 1992 TO DECEMBER 31, 1992

The term of protection has expired for the certificates listed below. The U.S. Plant Variety Protection Act no longer prohibits the unauthorized propagation of these varieties nor requires them to be sold by variety name only as a class of certified seed. However, varieties published in this list may possibly be protected under

CERT. NO. AGROTRICUM	VARIETY 2350	EXPIRATION DATE 12/12/1992	NAME OF CANNER Seed Research Inc.
/50002/ BEAN, GARDEN 7500054	/50002/ 3425 , GARDEN 7500054 Greenpak	12/12/1992	Seed Research inc. Rogers Brothers Seed Co.
7500072	Pax Lake Seneca	10/17/1992 11/24/1992	Asgrow Seed Campany Rogers Brothers Seed Company
CAULIFLOWER 7400052 COTTON	Olympus	11/24/1992	Asgrow Seed Company
7400088 7400089	Stripper 31A GSA 71	11/24/1992 11/24/1992	The Lubrizol Corporation The Lubrizol Corporation

CERTIFICATES EXPIRED OCTOBER 1, 1992 TO DECEMBER 31, 1992

	Koninklijke Zaaizaadbedrijven Gebroeders Sluis, $B.\mathrm{V}_{\bullet}$	Company	sed Co. Seed Co. ad Co., Inc.	, Inc.		. 8
NAME OF OWNER	Koninklijke Zaai B.V.	W. Atlee Burpee Company	Western Valley Seed Co. Rogers Brothers Seed Co. W. Brotherton Seed Co., Inc.	Steve Landry Rice Researchers, Inc. Rice Researchers, Inc.	Cargill, Inc.	W. Atlee Burpee Co.
EXPIRATION	10/17/1992	12/12/1992	11/24/1992 11/24/1992 11/24/19 2	10/17/1992 12/12/1992 10/17/1992	12/12/1992	11/24/1992
VARIETY	Excel 1	Redcoat	Green Sugar Canjoy Dane	Golden Steve Tsuru Mai Kokubelle	LOWER 7300060 Cargill Dwarf 101	Bright Scarlet
CERT.	<b>LETTUCE</b> 7500041	MARIGOLD 7100010	PEA 7500045 7500046 7500068	RICE 7200040 7400075 7400077	SAFFLOWER 7300060	SNAPDRAGON 7200108

### CERTIFICATES EXPIRED OCTOBER 1, 1992 TO DECEMBER 31, 1992

NAME OF GANER	Mississippi Agric. For. Expt. Sta. Agripro, Inc. Northrup King Co. V. R. Seeds, Inc. Northrup King Co.	W. Atlee Burpee Company W. Atlee Burpee Company	Hybritech Seed International Hybritech Seed International Cargill, Inc. World Seeds, Inc. Nebraska Agric. Expt. Sta. Nebraska Agric. Expt. Sta.	W. Atlee Burpee Company W. Atlee Burpee Co.
EXPIRATION DATE	12/12/1992 10/17/1992 12/12/1992 10/17/1992 12/12/1992	12/12/1992 12/12/1992	11/24/1992 10/17/1992 10/17/1992 12/12/1992 11/24/1992	12/12/1992 12/12/1992
VARIETY	Tracy Agripro 20 RA-526 Classic I B 186	<b>rPEA</b> 7100085 Salmonette 7100086 Lavender Delight	T, COMMON 7400044 DeKalb 581M 7400045 DeKalb 582M 7400068 Bounty 309 7400099 W.S. 1 7400107 Homestead	Emperor Ruffled Jumbo Scarlet
NO.	SOYBEAN 7400062 7500056 7500067 7500069 7500088	<b>SWEETPEA</b> 7100085 7100086	WHEAT, COMMON 7400044 7400045 7400068 740009 7400107 7400109	ZINNIA 7100059 7400033

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AGRICULTURAL MARKETING SERVICE
PLANT VARIETY PROTECTION OFFICE
NAL BUILDING, ROOM 500
10301 BALTIMORE BLVD.
BELTSVILLE, MARYLAND 20705-2351

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PENALTY FOR PRIVATE USE, \$300

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